



By Joshua Lederberg

Kids Today Grow Up Faster; Should Rights Come Sooner?

According to the common law, a person less than 21 years old is an infant. In most states, he is not yet a competent citizen; his civil and legal rights are restricted. Regardless of his own personal maturity and political sophistication, he is not entitled to vote, hold political office or make generally binding contracts. (He may qualify, however, for certain privileges like marriage or being drafted.)

From this standpoint, the alienation of the younger generation is a calculated and selective exclusion from many of the privileges and duties of citizenship.

The establishment's conservatism about democratizing its privileges is not the only reason for delaying the start of civil life until 21. If there is never enough time to achieve ultimate wisdom, 21 years is better than 10. The choice of exactly 21 years as the age of majority is deeply founded in the English common law. We might argue that centuries of experience have been distilled into this tradition.

THIS ARGUMENT is deflected by a closer look at some historical human biology. Dr. James Tanner of the University of London has been compiling statistics on human growth and development from many different countries. He has summarized his findings in a book "Education and Physical Growth," and in

a recent article in Scientific American.

The well-known trend towards greater robustness and stature of each new generation is documented in great quantitative detail. It is now news that people are clearly becoming ever bigger as well as more numerous, and both factors have to be taken account of in calculating the world's economic needs for food and fiber. Conversely, if some nations fail to keep their population numbers in balance with the availability of food, one inevitable adaptation will be in the retarded physical and associated mental development of their people.

A less well-known trend is speeded-up physical and sexual maturation. The most convenient measure of this process is the menarchial age, the time when girls begin to menstruate, and there is much evidence that the same relative trends apply to boys.

Over the last century the average menarchial age has crept back from 16½ to 13 years. Thus the modern woman of 18½ has reached a physical maturity matching a 21-year-old of the Victorian era. The United States has followed a parallel trend-line, but about 25 years ahead of Europe.

THE POLITICAL implications of such earlier maturation might be self-evident. But we lack absolute tests of

the level of political wisdom needed to maintain democratic society. If the slow nurturing of wisdom is the excuse for disenfranchising youth, we ought to ask for specific criteria of having reached this wisdom. The young could likewise question whether the old have maintained a grasp of the realities of contemporary life.

Professor Tanner suggests that improved nutrition is the principal cause of faster maturation, and it is hard to paint as coherent a picture on any other basis. Many puzzles still remain, nevertheless—such as the rather early maturation of Cuban and of Hong Kong Chinese girls, whose nutrition is not likely to be superb. Specific dietary factors, rather than overall nutrition, may well be involved, as well as genetic differences.

SINCE EARLY maturation is at best a mixed blessing—as the parents of any teenage girl will testify—we might be very grateful for more explicit information on how to temper early maturation by changes in diet or by drugs. But we must protect the ultimate attainment of youth's potentialities.

Equally important, we should be more sensitive in planning our educational systems, to large variation in rates of maturation among individual youngsters.